

A/E PERFORMANCE & SERVICES GUIDELINES

The following is to be used for establishing performance and services guidelines for all architects and engineers hired (A/E) by the A&E Division (A&E) and will be part of the Contract.

PROGRAMMING

The purpose of programming is to develop the agency's needs for the Project based upon the preliminary project program and other data gathered through interviews, charrettes, surveys and operational parameters.

Programming shall provide for the following:

Develop and document detailed requirements for the project, covering items such as design objectives, limitations, and criteria; gross area and space requirements; spatial relationships; needs and options for flexibility or expandability; special equipment and systems; site requirements; project schedule and budget requirements.

Space concepts and flow diagrams, functional relationships, access, circulation, and flow patterns within the building and on the site.

Existing facilities will require additional research to review existing conditions, assembling and reviewing information to identify and document areas to be involved in alterations, additions, repairs or demolition.

The Program shall contain the following items:

- Executive Summary with Project Statement

- Project Summary and Design Goals

- Space Program

- Planning and Design Criteria

 - codes, zoning, environmental requirements, clustering and layout criteria, building massing, blocking and stacking diagrams, space planning module, dimensional criteria, systems interface criteria, envelope interface, human factors, physical accessibility and ADA, style issues and constraints

- Building Performance Criteria and Design Intent Document

 - general notes, building envelope, structure, interior construction, hvac systems, plumbing systems, fire suppression systems, electrical systems, information technology systems

- Commissioning

 - The design team should assume that new-building projects of a value of \$5,000,000 or more or renovations with a combined mechanical and electrical value of \$1,500,000 or more will include commissioning for mechanical and electrical systems. It is the responsibility of the consultant to confirm commissioning with the A&E and to plan for all aspects of that process.

For commissioned projects, the information below shall be provided in a separate Design Intent Document. This document will become the basis for commissioning the project.

A room-by-room itemization of HVAC and Electrical requirements as described by the A&E and/or occupants:

- Temperature requirements
- Humidity requirements (if special)
- Exhaust requirements (ie: fume hoods)
- Pressurization (relative to hall or other spaces)
- Maximum permissible sound level
- Maximum occupancy
- Schedule of occupancy
- Number of computers or specialized equipment
- Special power quality
- Light levels
- Special lighting

The Division recommends the above information be prepared in a computer spread-sheet format.

Available utilities that must be used for the project:

- Electrical source, voltage, estimated power required by the new building and a confirmation from the power provider (utility) that such power is available,
- For steam, hot water or other thermal sources state the temperature, pressure and volume of the available source and the seasonal variance.

Documentation for required backup electrical power, heat and cooling in the event of a utility interruption for one of three levels of continued service:

- Safe computer shutdown only, or
- Continued limited operation only, or
- Complete continued operation

Includes the type of backup generator and backup fuels preferred.

Requirement for 24 hr/day operation and special back-up systems required. Special maintenance requirements due to 24 hour/day operation or for other reasons.

External noise requirements due to adjacent buildings and neighborhoods. External aesthetic requirements relating to exhaust stacks, smoke/vapor plumes or night lighting.

Design Intent document is to be submitted to the A/E Division for approval. Document shall be 100% available in electronic format for ease of transmittal and review. Adobe .pdf format is preferred.

Note--This is not engineering design information This is the A&E's needs stated in their own words to the architect or programming team. Information on actual system design is

submitted during schematic or preliminary design in the Basis of Design document (see below).

Site Requirements

preliminary building siting, site analysis, parking, traffic flow, grading and landscaping

Budget

Schedule

All final program documents shall be officially accepted in writing by the agency and A&E prior to moving beyond the programming stage.

DESIGN & CONSTRUCTION

Two methods of Basic service are available and can be broken into the following elements:

Method A

- a. Schematic Design Phase
- b. Design Development Phase
- c. Construction Documents Phase
- d. Bidding Phase
- e. Construction Administration Phase

Method B

- a. Preliminary Design Phase
- b. Construction Documents Phase
- c. Bidding Phase
- d. Construction Administration Phase

Basic services elements must include the normal architectural, structural, civil, mechanical and electrical engineering services. Each element is to be delineated in the following manner:

METHOD A

SCHEMATIC DESIGN PHASE - The A/E shall provide those services necessary to prepare schematic design documents consisting of drawings and other documents illustrating the general scope, scale and relationship of project components for approval by A&E. Design will be conceptual in nature and based upon the approved Project Program.

Schematic Design shall include the following:

Architectural Design

Services responding to the programming and project requirements and consisting of preparation of conceptual site and building plans for each level or floor, investigation of alternative approaches, site soil investigation and surveys, key sections, all elevations, preliminary selection of building systems and materials, development of approximate dimensions, areas and volumes.

Documents

Review of project documents presently consisting of the project program and budget.

Coordination

Coordination of the architectural, engineering, and other consultants involved in the project to deliver a complete schematic design.

Structural Design

Recommendations regarding basic structural material and systems, selection of the foundation system, outline framing plan, analysis and development of conceptual design solutions.

Mechanical Design

Consideration and recommendations regarding materials, systems and equipment, development of conceptual design solutions for energy sources/conservation, heating, ventilating and air conditioning, plumbing, fire protection and general space requirements.

Mechanical and Electrical Design

For mechanical design, consideration and recommendations regarding materials, systems and equipment, development of conceptual design solutions for energy sources/conservation, heating, ventilating and air conditioning, plumbing, fire protection and general space requirements.

For electrical design, consideration and recommendations regarding basic electrical materials, systems and equipment, analysis and development of conceptual design solutions for power service, distribution, lighting, communication, fire detection, alarms and general space requirements.

The mechanical and electrical design is summarized in the Basis of Design Document that includes a comprehensive description of the operation of the mechanical and electrical systems in the building with specific reference to meeting the requirements included in the Design Intent Narrative (see above). This document is to be revised as required throughout the design and the original and all revisions are to be submitted to, and approved by, the A/E Division prior to proceeding with work. Note that this document is required regardless of whether the project is commissioned or not.

The Basis of Design becomes a part of the commissioning report for commissioned projects and it becomes a part of the "as-built" drawings and specifications for uncommissioned projects. The document is intended to be developed by the design engineers, supplemented with small format drawings (11" by 17" maximum size) and eventually submitted in electronic format and hard copy (8 1/2" by 11") to the Division and the agency.

The Basis of Design is presented, in person, by representatives of the design team as part of staff training for the facility. At this time the operating staff shall have the opportunity to clarify any remaining questions about intended system operation.

Electrical Design

Consideration and recommendations regarding basic electrical materials, systems and equipment, analysis and development of conceptual design solutions for power service, distribution, lighting, communication, fire detection, alarms and general space requirements.

Civil Design

Site planning analysis including layout of site features, building position, preliminary grading, location of paving for walkways, driveways and parking. Also includes normal connections for building utilities such as water, sewer, gas/steam and power. Initial site study to determine rights-of-way, property boundaries and other property limitations.

Budget

Review the project budget and assist in the analysis of soft costs and establishment of a construction budget. Provide a per square foot cost of the schematic design and concepts.

Specifications

Outline specifications necessary to indicate the general scope of services to be included in the construction documents.

Scheduling

Review and analysis of the project schedule developed along with the project program. Perform revision of schedule indicating all milestones and anticipated impacts upon delivery of the project.

Presentations

Services consisting of appropriate presentations and materials as outlined in the project program. Can include renderings, models, computer simulations, public meetings, development of other presentation materials and artwork.

DESIGN DEVELOPMENT PHASE - The A/E shall provide those services necessary to prepare design development documents consisting of drawings and other documents of sufficient detail to fix and describe the size and character of the project for approval by A&E. Design Development includes the following:

Administration

Administrative functions including consultation, meetings and correspondence and progress design review conferences.

Architectural Design

Services consisting of the continued development and expansion of the schematic design documents in order to proceed with establishment of the final design documents. Documents shall consist of the final scope, relationships, forms, size and appearance. Building plans, sections and elevations, selection of building systems and materials, development of dimensions, areas and volumes are also included.

Documents

Review and checking of design development documents with regard to the programming and schematic design.

Coordination

Coordination of the architectural, engineering, and other design development documents involved in the project to deliver a complete design development package and to eliminate conflicts.

Structural Design

Continued development of specific structural material and systems, analysis and development of design solutions. Basic structural system and dimensions, design criteria, foundation design criteria, sizing of structural components and clearances.

Mechanical Design

Continued development of specific mechanical materials and systems, analysis and development of design solutions. Basic mechanical system and dimensions, design criteria for energy sources/conservation, heating, ventilating and air conditioning, plumbing, fire protection, vibration and acoustical control, visual impacts, equipment layouts, sizes and weights of major components, chases and specific space requirements.

Mechanical and Electrical Design

For mechanical design, continued development of specific mechanical materials and systems, analysis and development of design solutions. Complete and detailed mechanical system and dimensions, heating, ventilating and air conditioning, plumbing, fire protection, vibration and acoustical control, equipment details, sizes, elevations, plans and specifications.

For electrical design, continued development of specific electrical materials and systems, analysis and development of design solutions. Complete and detailed electrical system and dimensions, power service, distribution, lighting, communication, fire detection, alarms, chases, equipment layouts, plans and specifications.

Coordinate with, and support, the commissioning process as described above in "Design Development Phase."

Electrical Design

Continued development of specific electrical materials and systems, analysis and development of design solutions. Basic electrical system and dimensions, design criteria for energy sources/conservation, power service, distribution, lighting, communication, fire detection, alarms, chases, equipment layouts and clearances and specific space requirements.

Civil Design

Site survey, geotechnical/hydrogeological analysis including layout of the site (these are Additional Services). Basic civil features regarding building position, preliminary grading, location of paving for walkways, driveways, parking, all utilities, easements, boundary conditions, property limits.

Budget

Maintain the design development in accordance with the established construction cost. Continually review the project budget to coordinate appropriate design factors and limitations. Provide a detailed cost estimate based upon preliminary quantity take-offs.

Specifications

Continued development and coordination of outline specifications necessary to delineate the appropriate functions and minimum quality of the project.

Scheduling

Develop and maintain a CPM or bar chart project schedule of all activities to include investigations, data gathering, design phases, reviews, advertising, bidding, contract award, construction, punch list and project completion. Perform reviews and revisions of schedule indicating all milestones and anticipated impacts upon delivery of the project based upon issues and factors discovered during the design development phase.

CONSTRUCTION DOCUMENTS PHASE - The A/E shall provide those services necessary to prepare final construction documents consisting of specifications, drawings and other documents of sufficient detail to fix and describe the final size and character of the project for approval by A&E. Construction Documents includes the following:

Administration

Administrative functions including consultation, meetings and correspondence and progress design review conferences.

Architectural Design

Services consisting of the continued development and expansion of the design in order to proceed with and result in the final design documents. Documents shall consist of the final scope, relationships, forms, size and appearance. Building plans, sections and elevations, selection of building systems and materials, development of dimensions, areas and volumes are also included. Reflected ceiling plans must contain all light fixtures and HVAC grilles, registers and diffusers. Door and room finish schedules must be complete.

Documents

Review and checking of design development documents with regard to the programming and schematic design. Continuous review of the design and design process to ensure the highest level of quality control. 95% complete documents relate to the total effort required by the Architect and all consultants to produce construction documents that are ready for bidding. The effort to perform final coordination checking, final corrections, incorporation of comments and inclusion of the A&E's boilerplate constitutes the remaining 5% of the total effort required to produce the documents. The 95% complete documents **MUST** be considered by the Architect and all consultants as 100% complete and ready for bidding but must be discounted to 95% based upon any necessary revisions requested by the A&E. 95% documents shall consist of the following:

General –

- Drawing index contains all drawings and all sheet titles agree.
- All alternates have been identified and properly delineated.
- All details are referenced.
- All details are complete with dimensions, notations and materials.
- All details (A, S, M, P, E, C, etc.) are specific to the project and have been edited to reflect the actual project conditions.

Architectural –

- Reflected ceiling plan includes all light fixtures and all HVAC grilles/diffusers.
- Door and room finish and hardware schedules are complete.

Structural –

All details are specific to the project.

All plans have been coordinated and verified against architectural and mechanical drawings.

Mechanical –

Mechanical equipment schedules are complete.

Utilities exiting the building match locations and sizes on civil drawings.

Electrical –

All circuits are identified and all panel schedules are complete.

Specifications –

All Division 1 items pertain to the specific project.

Index contains all sections in the body of specifications.

All specification sections apply to the specific project.

Coordination

Coordination of the architectural, engineering, and other design development documents involved in the project to deliver a complete and final set of construction documents of the highest quality.

Structural Design

Continued development of specific structural material and systems, analysis and development of design solutions. Complete and detailed structural system and dimensions, design, foundation, sizing of structural components and clearances, details, elevations plans and specifications.

Mechanical Design

Continued development of specific mechanical materials and systems, analysis and development of design solutions. Complete and detailed mechanical system and dimensions, heating, ventilating and air conditioning, plumbing, fire protection, vibration and acoustical control, equipment details, sizes, elevations, schedules, plans and specifications. Coordination of utilities leaving the building with locations shown on civil plans.

Electrical Design

Continued development of specific electrical materials and systems, analysis and development of design solutions. Complete and detailed electrical system and dimensions, power service, distribution, lighting, communication, fire detection, alarms, chases, equipment layouts, circuits, panelboard schedules, plans and specifications.

Civil Design

Site survey, geotechnical/hydrogeological analysis including layout of the site. Complete and detailed civil design regarding building location, final grading, location of paving for walkways, driveways, parking, all utilities, easements, boundary conditions, property limits, plans and specifications.

Budget

Ensure the design in accordance with the established construction cost. Continually review the project budget to coordinate appropriate design factors and limitations. Provide a detailed cost estimate based upon quantity take-offs.

Specifications

Complete development and coordination of all specifications necessary to describe and detail the entire project and to set the level of quality acceptable.

Scheduling

Maintain the established project schedule. Perform reviews and revisions of schedule indicating all milestones and anticipated impacts upon delivery of the project based upon issues and factors discovered during the design.

Coordination Review

A&E may choose to have the documents reviewed through an independent third-party. This does not remove A/E from the responsibility to provide A&E with a fully-coordinated set of construction documents.

BIDDING PHASE - The A/E shall provide those services necessary to assist in obtaining bids and awarding a contract for construction. Bidding includes the following:

Documents

Organizing, coordinating, publishing, handling and distribution of all bidding documents including addenda and receipt and return of document deposits.

Coordination

Coordination between the disciplines for all questions and addenda.

Pre-Bid Walk-Through

Perform a pre-bid walk-through of the project with contractors in order to describe the general nature of the work, limits of construction and construction staging, phasing, and other issues relevant to provide contractors with a basic understanding project.

Continue to coordinate with, and support, the commissioning process as described above. The commissioning authority (CA) will make a presentation during the pre-bid walkthrough to explain the commissioning process to all interested parties. Direct questions regarding commissioning to the CA.

Addenda

Preparation and distribution as may be required including any and all supplementary drawings, specifications, instructions and notices of changes.

Budget

Stay aware of bidding climate and perform analysis of possible bid results in comparison to the project budget.

Substitutions

Consideration, analysis, comparisons and recommendations relative to substitutions proposed by bidders.

Bid Evaluation

Perform validation of the bids received and provide recommendations regarding the award of contracts as requested by A&E.

Negotiations

Coordinate and conduct negotiations in cooperation with the State and the Contractor in the event that the bids received are over the project budget but within the statutory 7% deductive negotiating range. If negotiations are successful, develop all documentation and pricing in a manner similar to an addendum for signature by the contractor.

Redesign

Perform redesign and publication of construction documents for rebidding or after negotiations if the project is not awardable during the initial bid.

Coordinate with the commissioning process as required.

CONSTRUCTION ADMINISTRATION - The A/E shall provide those services necessary to perform construction administration services necessary to provide a quality product to the State as set forth in the Construction Documents. Delivery of construction administration duties shall be in accordance with the A/E's contract and the General Conditions of the Construction contract which shall be inclusive of the following:

Administration

Construction contract administration involves all aspects of consultation, communication, progress reports, observations, meetings and functions necessary to maintain the project quality, budget, schedule and coordination.

Pre-Construction Conference

Upon issuance of a notice to proceed from the state, coordinate and conduct a pre-construction conference with the state's construction manager, agency and the successful contractor. Describe all Division 1 requirements and the general scope of the project, agency issues and concerns to be met by the contractor during construction and administrative procedures.

Continue to coordinate with, and support, the commissioning process as described above. The commissioning authority (CA) will make a presentation during the pre-construction conference to explain the commissioning process to all interested parties. Direct questions regarding commissioning to the CA.

Copies of the approved submittals will be routed to the CA for use in developing inspections and tests. Presence of the CA on the job does not diminish the consultant's responsibilities as described herein.

Coordination

Services between the architectural work and all disciplines involved in the design of the project.

Documents

Maintain sufficient sets of construction documents with all requests for information, requests for clarification, change orders, addenda, pay requests, shop drawings, submittals, etc. necessary to delivery a quality project within budget and on time. Services consist of preparation, reproduction and distribution of all clarification/information/change order documents in response to the Contractor or the State. Documents shall describe in sufficient detail, all work to be added, deleted, modified, review of proposals, review recommended changes for impacts on substantial completion date.

Shop Drawings

Perform review and comparison of all drawings and submissions by the Contractor for general conformance to the construction documents. Provide appropriate actions in a timely fashion in order to inform the Contractor regarding the product components.

Representation

Serve as the representative of the State throughout the duration of the project, protecting the State's interest in obtaining the project in accordance with the Construction Documents. This also includes meetings, meeting minutes, site observations, etc.

Schedules

Monitor the Contractor's progress relative to established schedules and make status reports accordingly. Compare the Contractor's schedule to current pay requests for accuracy and stage of completion. The A/E shall take no action concerning the Contractor's schedule which may be interpreted as an approval or endorsement. However, the A/E shall provide comments, concerns, inaccuracies, conflicts, etc. to the Contractor.

Pay Requests

Review and take appropriate action on all pay requests with regard to the Contractor's Schedule of Values, Progress Schedule, stored materials and stage of construction observed. Provide recommendations to the State with regard to payment.

Change Orders

Prepare, reproduce and distribute change orders. Perform estimates of cost, negotiate price, and determine impacts upon the Contractor and the date for project completion.

There are two parts of the standard A&E change order that often come to us incomplete. These are the "Justification for Cost Adjustment" and the "Justification for Schedule Adjustment".

Obviously, no commentary whatsoever is unacceptable but fairly regularly, the justification narratives sound like; "price is at or below Means Cost Data", or "time requested is appropriate for work described".

If the only requirement to review a change order was to attach a contractor's quote or look in the means cost guide, A&E would not need to procure CA services from the Architect.

It is the Contract Administrator's (Architect) responsibility, according to their contract, to review Change Order pricing and time extension requests for their appropriateness. Keep in mind that

A&E staff regularly has to defend change order appropriateness to auditors and agencies long after a project is finished. Therefore we need accurate justifications that convince the reader that the CA has reason to believe the contractor's proposals are fair.

Regarding Cost; consider checking with vendors or asking for written quotes for permanent materials, using estimating (like Means) to check manhours, reviewing labor rates as well as making sure OH&P is not built in if it is applied as 15% later, and checking to be sure the contractor's breakdown does not include items that should be included in the overhead markup (cost of estimating, office supervision, etc.). Other sources for comparing prices could include comparing similar work items in the approved schedule of values discussing the CA's experience costing work in that particular part of the state. We need you to really look at the pricing then describe how you came to your conclusion.

Regarding Time; two general issues should be considered. 1) Do the days requested add up to the estimated manhours quoted in the cost increase and 2) does the work described in the change order, really affect the critical path of the project? As the cliché goes, time is money and the State needs to be convinced that the increased cost or extended time being approved is an appropriate use of project funds.

Change Directives

Prepare, reproduce and distribute change directives. If the Contractor and A/E cannot agree on price and/or for the change but the State directs that it be performed, price and/or time will be negotiated at a later date.

Field Observations

Services consisting of site visits at intervals appropriate to the stage of construction and/or as otherwise generally agreed upon in order to become familiar with the overall progress and quality of the work in accordance with the Construction Documents. Prepare and distribute meeting minutes and all observations.

Cost Accounting

Maintain records of the project budget and all impacts thereupon which include, but are not limited to, testing services, incidental impacts, potential claims and all changes.

Project Closeout

Services to be initiated upon notice from the Contractor that the work is substantially complete, in accordance with the Construction Documents, to permit beneficial occupancy or utilization, and consisting of a detailed inspection for conformity of the work, compilation of a punch list, inspection of punch list items, issuance of certificate of substantial completion, final inspections, operations and maintenance manuals, receipt and transmittal of warranties, affidavits, lien waivers, permits and issuance of final certificate for payment. Final payment shall not be approved by the A/E prior to receipt and approval of all closeout items.

Continue to coordinate with, and support, the commissioning process as described above. During the acceptance phase of the project commissioning consists of functional performance testing.

Answer questions from the CA and the Division clarifying intent of operation. Attend meetings to discuss system operation questions with staff and CA. Assist in training by presenting the Basis of Design and answering questions from operating staff.

Record Documents

Prepare, reproduce and delivery to the State a set of record mylar drawings based upon the Contractor field records and change orders. The A/E shall provide the record drawings in electronic format on either 3.5" floppy disks or compact discs in AutoCAD format, Release 13 or higher. The electronic format is non-negotiable as the state has selected AutoCAD as its format. Additional fees will not be provided to those firms for conversion from other formats. The record document is considered an Additional Service.

O&M Manuals

Processing, reviewing and taking appropriate action on Operations and Maintenance Manuals provided by the Contractor. Approved O&M Manuals are to be provided to the agency.

Commissioning Report

The CA will prepare the commissioning report for submittal to the Division and the agency. Design team shall answer questions as required and submit required documentation (i.e.: the Design Intent Document and Basis of Design documents, revised as required).

Warranty Period

Investigate contractual and construction problems which arise during the warranty period. Perform inspections of the project, document warranty problems, and assist the State in having the Contractor provide corrective action. The warranty period commences upon substantial completion and continues for a period of one year from the date of final acceptance. Unless noted otherwise, the date of final acceptance shall be the date of the A/E's approval of the final pay request. The warranty period is considered an Additional Service.

Continue to coordinate with, and support, the commissioning process as described above during the warranty period. The commissioning authority (CA) will supervise off-season testing and continue to trouble-shoot during this period.

METHOD B

This method of services is nearly identical to that under Method A. However, Method B is utilized when the Project Program is well defined or when the project is relatively straight forward so as to not need a Schematic Design Phase. Under this method, the site survey, geotechnical work, data gathering, etc. are all performed under the Preliminary Design Phase. The Preliminary Design Phase is essentially a combination of the Schematic Design and Design Development Phases of Method A.

ADDITIONAL SERVICES

Additional Services are those which require performance of the A/E but do not relate to a fundamental function of the design and construction of a project. The majority of projects should be completed within the confines of the Basic Services fee but others will be more complex and will require a range of extra services which must be negotiated per task. As a project becomes more complex, it may demand a variety of specialized services. Additional Services are not intended as an adjustment to Basic Services and should reflect actual anticipated costs. The following is a listing of generally recognized Additional Services:

Alternative Cost Studies	Energy Analysis	Programming	Space Schematics
Public Presentations	Renderings, Models, Artwork	Feasibility Studies	Fund Raising
Site Surveys	Aerial Mapping	Geotechnical Engineering	Hydrogeological Engineering
Soils Analysis	Value Engineering	Direct Commissioning performed by the Design Team	On-Site Representation

Advertising	Redi-Check Review	ICBO Review	Specialized Consultants
Testing	Special Travel	Record Drawings	Warranty
Document Reproduction	Special Furnishings	Environmental Monitoring	Non-negligent Litigation

SPECIFICATIONS AND DOCUMENTS

All Specifications shall be provided in CSI Format. No other format will be acceptable.

Plans and drawings shall be scaled as follows:

All floor plans and elevations shall be scaled at $1/8'' = 1'-0''$ unless the building is large enough to require the scale to be $1/16'' = 1'-0''$. No other scales will be acceptable.

All detail plans, detail sections, and detail elevations shall be scaled at $1/4'' = 1'-0''$, $1/2'' = 1'-0''$, and/or $3/4'' = 1'-0''$. No other scales will be acceptable.

All floor plans and elevations shall be scaled at $1/8'' = 1'-0''$ unless the building is large enough to require the scale to be $1/16'' = 1'-0''$. No other scales will be acceptable. Scale shall be shown in the view title (not the drawing title block).

All detail plans, detail sections, and detail elevations shall be scaled at $1/4'' = 1'-0''$, $1/2'' = 1'-0''$, and/or $3/4'' = 1'-0''$. No other scales will be acceptable. Scale shall be shown in the view title (not the drawing title block).

All plan views shall be oriented with North up or to the right (down or to the left is not acceptable). All plan views (regardless of discipline) shall use the same north reference direction and shall include a north designator in the view title (not the drawing title block).

All plan views and sections (regardless of discipline) shall show labeled column lines for ease of coordination with other views.

Where space allows, relevant legends and abbreviation lists shall be shown on all sheets of the discipline (i.e.: mechanical legend and abbreviations on all mechanical sheets).

CODE REVIEWS, DESIGN REVIEWS AND COMMENTS

The A/E is responsible for code compliance issues and obtaining code reviews from local jurisdictions and municipalities at each phase of design. The A/E is responsible for verification of jurisdictional boundaries concerning who is responsible (i.e. municipalities or State Building Codes) for code reviews and issuance of building and other permits. For projects which require review and permits from the State's Building Codes Bureau, the A/E shall provide a copy of the plans and specifications to A&E who shall convey the plans to Building Codes. A&E will also pay for the plan review to be performed by the State's Building Codes Bureau.

The A/E shall respond to all design review comments provided by A&E, the agency and other persons who perform reviews. Responses shall be similar to "accepted" or "acknowledged" for those items that the A/E does not dispute and that will then be incorporated into the design documents. Responses to comments such as "denied" or "unacceptable" shall have a written justification provided as to why the A/E believes that a comment is invalid or non-applicable. Responses shall be provided within ten (10) calendar days of receipt of comments.

LINES OF AUTHORITY

The A/E must recognize the proper lines of authority concerning all activities and work on the Project. The A&E Division is the contracting entity and "A&E" thereby necessitating all approvals be made by the Division. A&E retains its rights to refuse payment, changes, withhold approvals, etc. for all work performed by an A/E at the direction of an agency or person(s) other than the A&E Division Project Manager.

The A/E must express to those agencies and persons who request changes and additional work to be performed that approval must be received from A&E prior to complying with such requests.

END OF A/E PERFORMANCE & SERVICES GUIDELINES